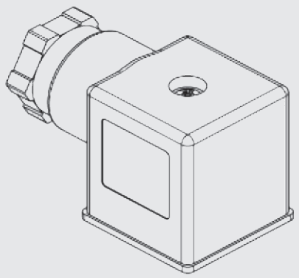
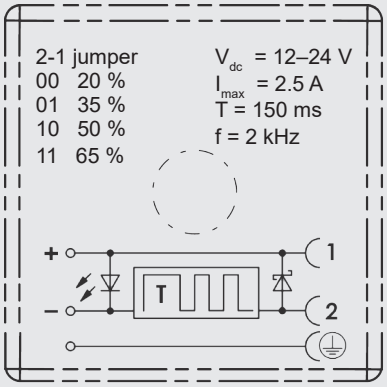
HYDAC INTERNATIONAL



Power reduction plug
LRS2
For solenoid coils with DIN plug connector

FUNCTION



PRODUCT ADVANTAGES

- Reduced coil temperature due to lower current feed
- Longer coil service life due to reduced load
- Energy and cost savings due to the energy requirement being reduced by up to 35 % to 80 %
- Reduced temperature ingress into the hydraulic system
- Compatible with all of the solenoid valves with a DC coil offered by HYDAC (see table “Jumper code”)

DESCRIPTION OF FUNCTION

The power reduction plug LRS2 is designed to reduce the power on solenoid coils in order to save energy.

It contains electronics which provide the full power required only when switching on the coil and then, by means of a PWM signal, reduce the power to the level needed to maintain the position. The PWM signal delivers an average current over a series of switch-off times.

The plug connector is advantageous particularly for battery-operated mobile machines, but its energy-saving potential may of course be exploited anywhere.

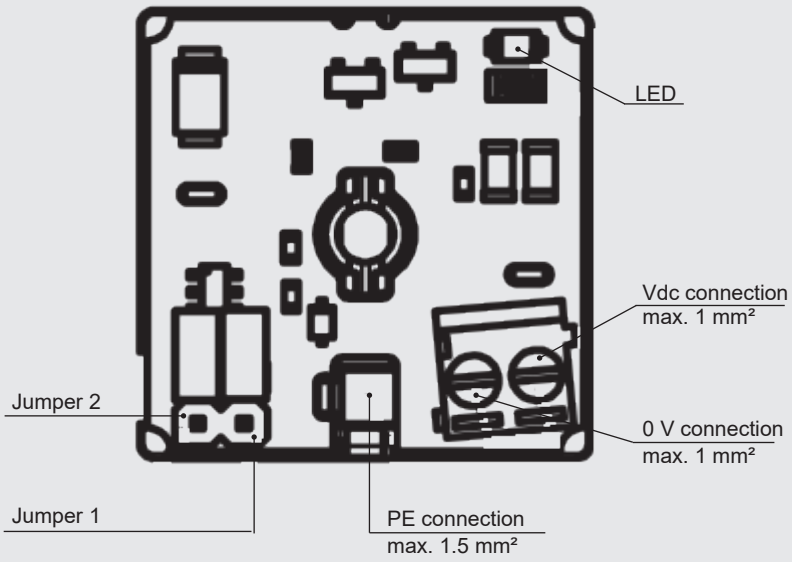
EN 5.255.6.0/05.23

SPECIFICATIONS

Rated voltage	12 / 24 volts DC
Maximum current	2.5 amps (with no reduction)
Holding time at 100 %	150 – 175 ms
Ambient temperature range	min. -30 °C to max. +85 °C
Switching frequency	2 kHz at 24 V
On-off ratio	Four selectable levels for power reduction
Design	EN 175301-803 form A, ISO 4400
Materials	Housing: Polyethylene, opaque Seal rings: NBR (standard)
Weight	0.08 kg
LED display	Yes
Protection against reverse polarity / overvoltage	No
Sealing	With onion grommets or supplied sealing rings for cables with diameter 6–8 mm
Application	For solenoid coils with 12/24 V DC and DIN plug connector

TERMINAL CONNECTIONS

Only use for DC voltage



JUMPER CODES (suggestions for the main valves)

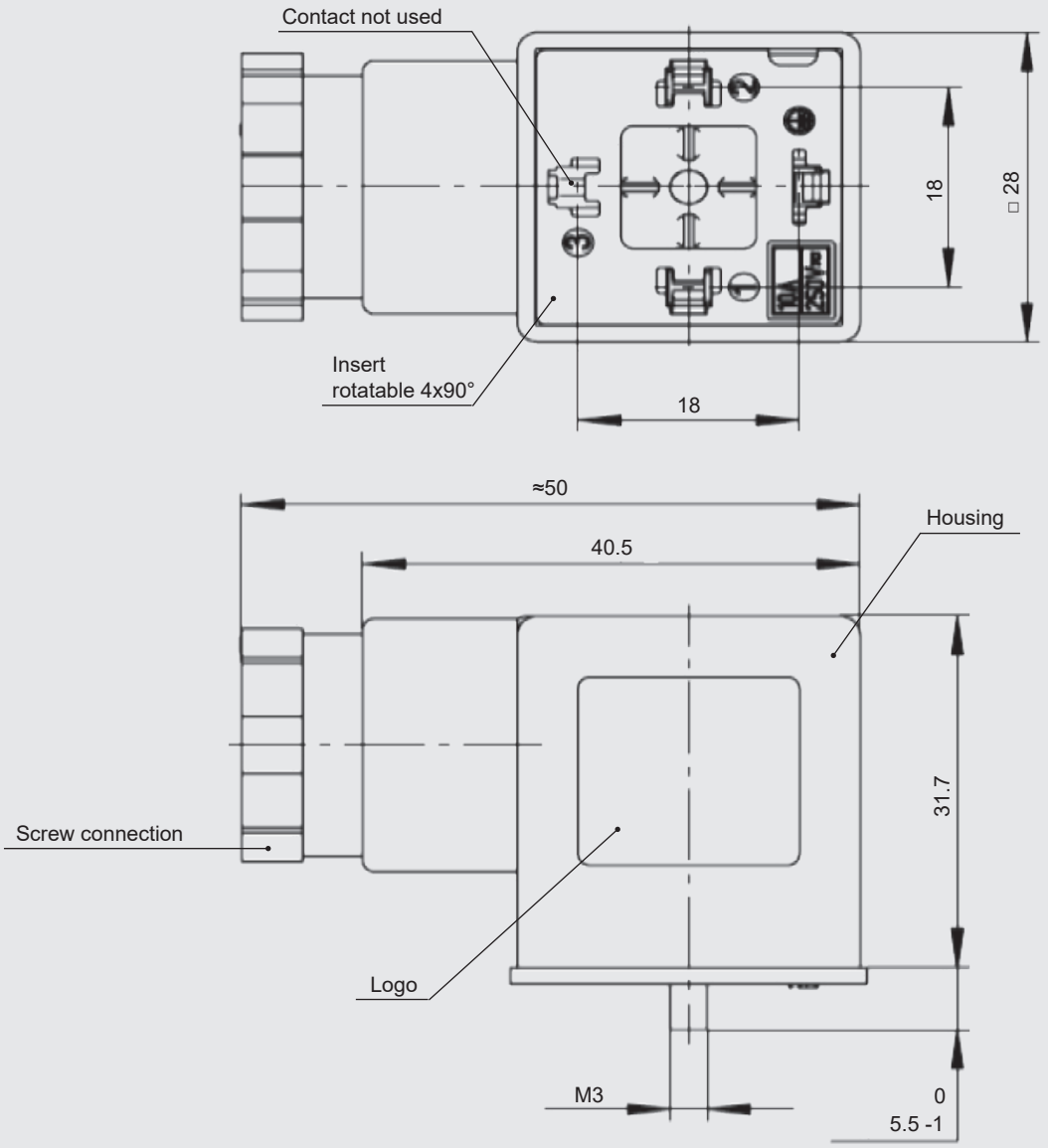
Valve type	Jumper code
WK07L	11
WK08W	01
WK08A	10
WK08C	10
WK08D	10
WK08R	10
WK08X	11
WK08Z	11
WK081V	11
WK081W	01
WK10A	11
WK10C	01
WK10D	11
WK10E	01
WK10F	10
WK10G	10
WK10H	11

Valve type	Jumper code
WK10K	11
WK10L	11
WK10N	11
WK10P	01
WK10R	10
WK10S	01
WK10T	01
WK10V	11
WK10W	10
WK10Y	01
WK10Z	10
WK10J	10
WKM08130C	10
WKM08130D	11
WKM10130D	10
WS08C	10
WKM08140Y	10

Valve type	Jumper code
WKM08140X	11
WKM10130C	01
WS08D	11
WS08V	10
WS08W	10
WS08Y	01
WS08Z	01
WS10W	01
WS10Z	01
WS12Z/R	01
WS16Y/R	01
WS16Z/R	01
WSEC08130	10
WSM08130C	10
WSM08130D	11
WSM12120V	01
WSM06020W	01

Valve type	Jumper code
WSM12120W	01
WSM12120YR	11
WSM12120Z	01
WSM12120ZR	01
WSM06020V	01
WSM06020Y	01
WSM06020Z	01
WSM10120Z	01
WSM10120R	01
WSM10120W	10
WSM16520V	11
WSM16520W	10
WK08120V	11
WS08ZR	01

DIMENSIONS



Millimetres
Subject to technical modifications.

SETTING THE HOLDING CURRENT

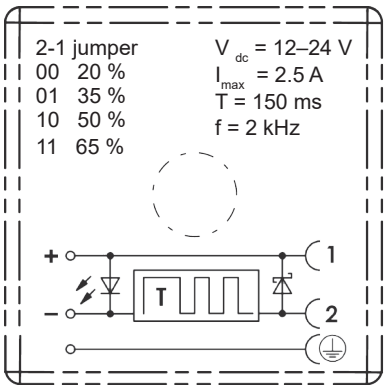
First take the valve type from the table. The bit pattern of the jumper (jumper code) must then be transmitted to the LRS2.

Example with power consumption of the coil (at room temperature)

Power consumption = rated current x nominal voltage

Jumper code 10 corresponds to reducing the electrical holding current to 50 % of the electrical power consumption.

In the case of COIL 24DG-40-1836, around 19 watts power consumption is reduced to 9.5 watts holding current in this example.



MODEL CODE

LRS2 – KPL – Z4 –TR–2pol–LED

Description
Power reduction plug

Type
KPL = complete with seal ring and screw connection

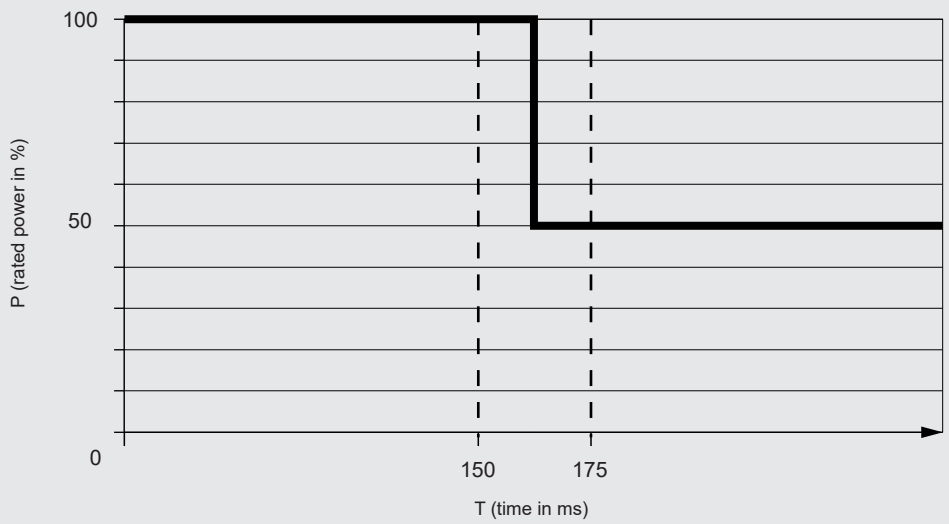
Type of connection
Z4 = connection in acc. with EN 175301-803, form A

Housing material
TR = polyethylene, opaque

No. of poles
2pol = 2-pole

LED status

SAMPLE CHARACTERISTICS



MATERIAL OVERVIEW

Standard models

Designation	Part No.
LRS2 KPL Z4 TR 2POL LED	4747017

Other versions on request.

NOTE

The information in this brochure relates to the operating conditions and applications described. For applications not described, please contact the relevant technical department.

Subject to technical modifications.

Documents are only valid if they have been obtained via the website and are up-to-date.

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